

PART IV COST COMPARISON REVIEW STEPS

1. **Background.** This guide provides instructions for reviewing A-76 cost comparisons developed with COMPARE. Within DA, activities will develop in-house cost estimates using the COMPARE software program. Consequently, in addition to OMB, DOD, and Army guidance, auditors need to obtain the Air Force developed COMPARE software and User's Manual to facilitate their review. The references to line numbers in this audit guide correspond to the Cost Comparison Form (CCF) generated by COMPARE. However, as you review the guidance contained in the OMB Revised Supplemental Handbook, you will notice that COMPARE has changed some of the line numbers. Nevertheless, OMB guidance governs how each element of the cost estimate will be calculated. Therefore, where the numbers are different, this audit guide will also provide a cross-reference to the appropriate line number in the Handbook.

We have included audit steps for some items we will rarely, if ever see on the Cost Comparison Forms we review. For example, major commands have emphasized that it is normally in the best interest of the Army to have the government furnish all facilities and equipment in the event of a contract decision. Consequently, we anticipate minimal review requirements concerning depreciation and gain on assets. Therefore, throughout this guide, we have highlighted the audit steps we do not anticipate using on a regular basis by placing them in italics.

2. **Review Objective.** To ensure all costs entered on the Cost Comparison Form are fully justified and calculated in accordance with the procedures described in Part II of the Handbook. Specific objectives are:

- To evaluate the adequacy of audit trails and availability of supporting documentation.
- To evaluate the reasonableness of assumptions used in making cost estimates.
- To ensure the in-house cost estimate is current, complete, reasonable, and in compliance with OMB Circular A-76 and related DOD and Army guidance.
- To provide early identification of problems which may require action by command in order to develop a reasonable cost estimate and permit timely completion of our review.

3. **Preliminary Review Steps**

a. Ensure that command has provided the following documents before proceeding with your review:

(1) Final Performance Work Statement (PWS).

(2) Management Study to include final MEO documentation, printed CCF with signature page (which also includes command's MEO certification), and Technical Performance Plan (TPP) when the solicitation is for a negotiated best value procurement.

(3) Printed copies of:

- COMPARE line rationale documentation (or similar form of supporting documentation).
- Common costs documentation (this may be included as part of the line rationale or as a separate attachment).
- COMPARE individual input records.
- COMPARE worksheets.
- COMPARE Study Tables (not the Master Tables).
- COMPARE Error list.

(4) Automated copy of the COMPARE Study File (with password).

(5) Access to a copy of the solicitation package.

b. Determine whether an adequate audit trail exists between entries on the CCF and supporting documents. Verify whether all assumptions, data sources, estimates, and methods of cost accumulation are documented, cross-referenced to the CCF, and available for review. Pay special attention to cost elements that must be calculated outside of COMPARE. Some examples include premium pay (i.e., overtime, night differential, environmental differential and Sunday pay) and one-time conversion costs. **Ensure that the supporting documentation is sufficient enough that it allows for the cost package to stand on its own without further explanation.** However, do not at this time evaluate the reasonableness of command's rationale. At this point of our review, we are only interested in determining whether command has adequately documented how it arrived at its estimates.

Don't insist that command use the Line Rationale built into COMPARE as long as they use another acceptable form of documentation. Appendix C of the User's Manual describes the format for documenting line rationale. In general, the line rationale is used to document how the government developed its cost estimate. For example, the line rationale should tell us such things as which positions receive environmental differential pay, which useful lives on assets were extended, and why and how command arrived at cost estimates

where precise amounts were not available. However, command may choose to develop its supporting documentation outside of COMPARE. Regardless of form, our only concern should be whether command's supporting documentation adequately explains how all elements of the in-house cost estimate were developed.

c. Verify that the in-house cost estimate and request for bids or proposals are based on the same performance periods. When the first period of performance is less than a full year, determine whether all in-house cost elements, except one-time conversion costs, have been prorated over the number of months in the first performance period. You can do this by comparing the performance periods entered on the Study Characteristics Record to the periods of performance contained in the solicitation.

d. Review the Study Characteristics Record to determine whether the correct **Method of Operation Code** was used.

(1) **Code I** is used when the activity under study is government operated and is not also competing for the right to perform currently contracted work.

(2) **Code E** is used when the activity is competing for the right to perform the work it now does as well as currently contracted work.

When an "I" is inappropriately used instead of code of "E", COMPARE will overstate the Minimum Conversion Differential. Moreover, once entered into COMPARE, the **Method of Operation Code** cannot be changed.

Consequently, when this occurs, we need to immediately let command know that it will have to create a new cost study and re-input all of the data entries (using the correct Method of Operation Code) in order to correct the in-house cost estimate. This is explained in detail in the discussion of the Study Characteristics input record in Chapter 3 of the User's Manual.

This input record is also used to tell COMPARE which pay scales (GS, FWS, and NAF) and grade steps will be used in the cost study. Therefore, you should also verify that Step 5 was used for GS employees and that Step 4 was used for FWS employees. You can find this information in the **Grade Step Averages To Be Used** Field. **If there are any step deviations, verify that the study package also includes a copy of an OMB approved waiver for those deviations.**

e. Obtain historical data concerning premium pay such as Sunday, holiday, night differential, night shift differential, environmental, hazardous, and overtime pay from the budget or personnel office. Compare this information with the in-house cost estimate to determine whether command has included appropriate types of premium pay in its cost estimate. Once

again, at this stage of our review, we are not evaluating the reasonableness of command's estimates of premium pay -- we are only interested in determining whether the estimates appear to be complete.

f. If you note significant inconsistencies, errors or omissions in accomplishing the preliminary review steps, bring them to the immediate attention of command personnel so that they can take timely corrective actions.

4. **COMPARE Study Table Review Steps.** COMPARE performs calculations based on cost factors downloaded and entered into study tables. Current cost factors must be obtained from the ACSIM website and the study tables must be updated correctly in order for the in-house cost estimates to be correct. Auditors can obtain current cost factors, as well as copies of GS and FWS pay schedules, via the Installation Studies (IMT) portion of the USAAA Intranet. **Be sure that you obtain pay schedules containing the correct locality pay for the installation you are reviewing.** Appendix B of the User's Manual provides detailed instructions on how to update COMPARE study tables. In addition, you should use the COMPARE Error List, which is described in Appendix D of the User's Manual to assist you in your review of the study tables and cost comparison form.

COMPARE requires its users to maintain a current set of master tables. Army activities keep their master tables up to date by downloading copies of the current tables from ACSIM. When activities create cost studies, the master tables become study tables. Changes are made to the study tables as required by the circumstances related to each individual cost study. Most of the cost factors contained in the study tables will be correct as long as the activities obtained the current cost factors from ACSIM. However, some of the cost factors require manual entries (Tables 2, 3 and 8). Consequently, we will use the following approach to accomplish our review of the study tables.

a. Download the master tables into the COMPARE program on your computer. Use the link on the IMT portion of the USAAA website to obtain the current factors. Follow the instructions in Appendix B of the User's Manual to update your **master tables** and then print the master tables.

b. Trace the current cost factors from this audit guide to the appropriate tables.

c. Trace the current cost factors from the latest OMB Transmittal Memorandum and Appendix C of Circular A-94 to Table 8.

d. For those factors not included in the audit guide or OMB guidance (e.g., fuels inflation factors in Table 8), trace the factors from your master tables to the study tables provided by command.

Make sure that command provided you with copies of the study tables for the cost comparison, not copies of the master tables. You can verify which tables you have by reading the heading at the top of each table.

e. **Review Steps**

(1) **Table 2 – GS Salary Factors.** Obtain the current GS pay schedule for the activity being studied. Trace the annual rates in the pay schedule to Study Table 2 to determine whether it has been properly updated. Ensure that the **From** date is 01/01/XX and that the **To** date is 12/31/XX for each line entry shown in this table (substitute the actual effective year of the GS pay schedule for XX). Ensure the annual salaries in this table were in effect as of the **as of date of the base year**, which you can find on the Study Characteristics Record. COMPARE uses this date to calculate inflation costs. For example, if your GS salaries went into effect on 1 January 1999, you must use a base year date of 1 January 1999 or later. Here is what will happen if you tell COMPARE to use an earlier base year date such as 1 October 1998. In effect, you are telling COMPARE that you have loaded a 1998 GS pay schedule into Table 2. Consequently, although you have actually loaded 1999 GS salaries, the program thinks that it needs to apply 1999 inflation factors against 1998 salaries in order to bring them up to date. As a result, your personnel costs will be overstated.

(2) **Table 3 – FWS Hourly Wage Factors.** Obtain the current FWS pay schedule for the activity being studied. Trace the hourly rates in the pay schedule to Study Table 3 to determine whether it has been properly updated. Ensure that the effective day, month and year of the **From** and **To** dates in the table are correct. You can obtain the effective date of the current hourly wage rates from the FWS pay schedule. All dates must be the same for every line entry shown in this table. Ensure the hourly wages in this table were in effect as of the **as of date of the base year** shown in the study.

(3) **Table 4 – NAF Inflation Relational Table.** If NAF positions are included in the cost study, ensure Table 4 indicates that salaried positions are inflated using GS inflation factors and hourly rate positions are inflated using the FWS inflation factors.

(4) **Table 7 – Fringe/Medicare Factors.** Determine whether the factors contained in Table 7 match the values established by OMB. In general, the Supplemental Handbook provides these factors. However, from time to time, OMB may update the factors with supplemental guidance. For example, OMB A-76 Transmittal Memorandum No. 19 has revised several of the factors. Army activities download these factors from the ACSIM website. However, there will always be a lag between the time OMB revises its factors and the time ASCIM revises its data. Nonetheless, activities must use the current OMB factors when doing their cost studies. In the past, OMB has made a practice of

including new Transmittal Memorandums in Updates to the A-76 Circular. Here are the current factors established by OMB:

Retirement	24.00 Percent
Health and Life Insurance	5.70 Percent
Other Benefits	<u>1.70 Percent</u>
Total	31.40 Percent
Medicare	1.45 Percent
Old Age and Survivors Insurance	6.20 Percent

(5) **Table 8 – Inflation Cost Factors/Rates.** Obtain the latest OMB Transmittal Memorandum for updating pay raise assumptions and inflation factors via the Installation Studies portion of the USAAA Intranet. Also, obtain the latest Appendix C to OMB Circular A-94 for updating the cost of capital rate. Review the values in Table 8 to ensure they match the current values issued by ACSIM. Again, there may be a lag between the time OMB revises these factors and the time when ACSIM changes the factors on its website. Always ensure that the activity used the current OMB factors. Here are the current factors:

- Casualty Insurance Rate - .5 percent.
- Conversion Differential Factor – 10 percent.
- Liability Insurance Rate - .7 percent.
- Overhead Cost Factor – 12 percent.
- Packing, Crating, and Handling Rate – 3.5 percent.
- Transportation – 3.75 percent.
- Severance Pay Rate – 4 percent.

You must pay special attention to the following factors to ensure that command updated them correctly:

(a) Civilian Pay (FWS & GS), Military Pay, Fuels, and Operations and Maintenance. Ensure that each set of inflation factors is preceded by a zero base factor that begins with October 1, 1950 and extends to a date immediately before that period containing an inflation factor greater than zero.

(b) Cost of Capital. Trace the cost of capital rate contained in Appendix C of OMB Circular A-94 to Table 8 to ensure it matches. The cost of capital rate is the **Nominal Interest Rate on Treasury Notes and Bonds.**

Ensure the study table contains the rate corresponding to the number of performance periods in the study -- if the study contains 5 performance periods, command should use the 5-year rate.

(c) Fuels Inflation Factor. Trace the fuels inflation factors from your Master Table 8 to Study Table 8.

(d) FWS Pay Factors. Trace the pay raise inflation factors from the latest OMB Transmittal Memorandum to Table 8 to ensure they match. Ensure the effective **From Month** for these factors has been changed to match the effective **From Month** shown in Study Table 3. Ensure that no changes have been made to the day and year. For example, if the FWS pay raise in your cost study takes effect on July 19, each year the **From Date** should read 07/01/XX. Also, ensure for each FWS line entry that the **To Date** has been changed so that the dates for each line run consecutively. Continuing with our example above, each line should have a **To Date** of 06/30/XX.

(e) GS Pay Factors. Trace the pay raise inflation factors from the latest OMB Transmittal Memorandum to Table 8 to ensure they match. Ensure the **From Date** is 01/01/XX and the **To Date** is 12/31/XX for each year (substitute the appropriate year for XX).

(f) Military Pay Inflation Factors. When there are military personnel included in the cost study, trace the pay raise inflation factors from the latest OMB Transmittal Memorandum to Table 8 to ensure they match. Ensure the **From Date** is 01/01/XX and the **To Date** is 12/31/XX for each year.

(g) Operations and Maintenance Inflation Factors. Trace the non-pay inflation factors from the latest OMB Transmittal Memorandum to Table 8 to ensure they match. Ensure the **From Date** is 10/01/XX and the **To Date** is 09/30/XX for each year.

(6) **Table 9 – Material/Supply Mark-Up Rates**. Ensure that there are not any mark-up rates in Table 9. Department of the Army activities **do not** use mark-up rates in A-76 cost competitions.

(7) **Table 10 – FTE Available Work Hours and Pay Conversion Hours**. Ensure all table values match the current values issued by ACSIM. The current factors are:

- Intermittent Employees – 2,007.
- Full or Part-time Employees – 1,776.
- Conversion Hours (Hourly to Annual Pay) – 2,087.

(8) **Table 12 – Useful Life and Disposal Values.** Download the current cost factors from ACSIM and create a set of master tables. Select several federal stock classes for review, and compare the useful lives and disposal values in your Table 12 to the values shown in Table 12 of the activity's cost study.

(9) **Table 13 – Tax Rates.** Determine whether the table value selected for the activity being studied is appropriate and matches the value issued by ACSIM. You will need to review the Contract/ISSA Price and Federal Income Taxes worksheet to determine which **Industry Code** was entered into the cost study. Compare this code to the list of codes and industry descriptions contained in Table 13 to determine whether the proper code was used in the cost study. This decision is not always clear cut and sometimes requires the application of best judgement. Consequently, you may need to discuss which code best relates to the types of services being studied with the activity's functional area experts. Verify that the tax rate for the industry code used in the cost study matches the tax rate for that code in your set of master tables.

(10) **Table 14 – Military Composite Rates.** If there are any military personnel in the MEO you are reviewing, verify that the annual rates contained in Table 14 match the rates provided by ACSIM. Also, verify that the rates in this table were in effect as of the **as of date of the base year** shown in the study and ensure that the **Effective** date is correct.

IN-HOUSE PERFORMANCE COSTS

Before beginning the review of the CCF, the auditor should be thoroughly familiar with Part II of the Supplemental Handbook and Chapter 5 of DA Pamphlet 5-20.

Keep in mind that there will be times where you can continue your review while command is simultaneously correcting portions of the cost estimate, such as the one-time conversion costs contained in Line 12. However, there will be other times (the Minimum Conversion Differential error discussed in paragraph 4 above) where you will need to stop your review and give the cost study back to command. **Use auditor judgement to determine how significant the problems are.**

5. Cost Comparison Form Line 1 – Personnel Costs

a. **Background.** CAs are generally labor-intensive. The personnel costs for accomplishing the requirements specified in the PWS are included in

this line. Line 1 includes the cost of all direct in-house labor and supervision necessary to accomplish the requirements of the PWS.

b. **In-House Staffing Estimate.** Productive workhours can be converted to fulltime equivalents (FTEs) by dividing the estimated total hours required by skill by 1,776 hours to determine the number of positions required. For intermittent positions to be expressed in FTEs, divide the estimated total hours required by skill by 2,007 annual available hours. The annual available hours exclude annual leave, sick leave, administrative leave, training, and other non-productive hours. As a general rule, General Schedule (GS) salary is expressed as an annual rate of pay and the Federal Wage System (FWS) salary is expressed as an hourly rate. For positions used on a prearranged, regularly scheduled tour of duty, this hourly rate is multiplied by 2,087 hours to obtain yearly pay.

Wages and salaries for civilian personnel will be developed based on the position structure developed in the management study. Current pay rates based on the government-wide representative rate of Step 5 for GS and Step 4 for FWS employees should be used to develop the in-house cost estimate.

c. **Civilian Fringe Benefits.** The Supplemental Handbook provides government-wide standard factors for fringe benefits. However, OMB A-76 Transmittal Memorandum No. 19 has revised some of the factors. Moreover, in the future, OMB may issue supplemental guidance that revises these factors again. Here are the current factors:

(1) The following standard fringe benefit factors are applied to labor costs of employees under either the Civil Service Retirement or the Federal Employees Retirement Systems:

- Retirement – 24 percent.
- Health and life insurance – 5.7 percent.
- Medicare – 1.45 percent.
- Other benefits (including workmen's compensation, unemployment programs, bonuses and awards – 1.7 percent.

(2) For civilian employees not covered by either of the two retirement systems (normally intermittent or temporary employees), the Federal Insurance Contribution Act (FICA) cost factor applied to salary or wages is the employer contribution rate. The FICA rate must be applied only to wages and salaries subject to the tax. The current rate is 7.65 percent.

d. **Other Pay and Other Entitlements.** Entitlements that don't earn fringe benefits are classified as **Other Pay**. Some examples are night differential pay for GS employees, overtime, holiday, and uniform allowances.

Conversely, **Other Entitlements** are entitlements that earn fringe benefits. Some examples are night differential pay for FWS employees, environmental differential pay, and premium pay for civilian fire fighters and law enforcement officers.

Information needed to ensure that all other pay and other entitlements have been considered and calculated correctly can be obtained from the personnel or payroll office. Other pay and other entitlements are calculated outside of the COMPARE program. Consequently, these computations should be shown on separate worksheets and included as support for the COMPARE personnel costs worksheets.

e. **Inflation.** Contractor positions that are subject to an economic price adjustment clause (positions subject to the Service Contract or Davis-Bacon Acts) are not inflated beyond the first performance period. These positions are subject to future wage determination adjustments performed by the Department of Labor. Government positions equivalent to these contractor positions must be identified. Activities can obtain this information from their personnel offices. To maintain a level playing field, personnel costs for equivalent government positions are **not** inflated beyond the first performance period. Salaries for the remaining positions are inflated through all of the performance periods, using the inflation factors provided by OMB.

f. **Review Steps**

(1) Determine whether the cost estimate agrees with the staffing structure that was included in the management study. Trace the personnel identified in the MEO to the cost study documents to ensure that the proper numbers of personnel and grade levels were captured in the cost estimate. You may use either the Civilian Personnel Requirements and Costs input records or the Base Year Personnel Costs worksheet to do this review.

(2) Ensure that command has obtained a listing of MEO personnel who are **not** subject to an economic price adjustment (EPA) clause from its supporting CPAC or contracting office. As a general rule, these will be supervisors and professionals such as accountants, lawyers and engineers. An entry of "Y" or "N" in the **EPA** Field on each Civilian Personnel Requirements and Costs input record lets COMPARE know whether personnel are subject to an EPA clause. Based on these entries, the software program will inflate personnel costs subject to an EPA clause through the first performance period only. It will inflate all remaining personnel costs through all performance periods. Trace the personnel that are not subject to an EPA clause from the listing provided by CPAC to the Base Year Personnel Costs worksheet to ensure that these are the only personnel inflated in the out years. COMPARE identifies each of these positions with an asterisk on this worksheet.

(3) Determine whether command has included appropriate amounts of **Other Pay** in the cost estimate. Use the historical data you obtained during the preliminary review of the in-house cost estimate (preliminary review step 5) to assess the completeness of command's estimate of other pay. Ensure that the MEO identifies which employees by grade level will receive each category of other pay. Ensure command has included supporting documentation that shows how each element of other pay was calculated. Verify whether each category of other pay was calculated correctly and then trace the entries to the Civilian Personnel Requirements and Costs input records. As you do this review, note that the top half of each input record is concerned with the costs for one position (i.e., 1 GS-12 Auditor). However, the bottom half is concerned with the costs for all of the FTEs entered on each particular input record (i.e., 500 GS-12 Auditors). **Make sure you verify that the costs entered for other pay were for one position (not the total for all like positions) in the Other Added Pay Field of each appropriate input record.** You can obtain guidance on how to compute overtime, holiday pay, etc. from the Internet, Federal Employees Almanac, DFAS, and the personnel office.

(4) Determine whether command has included appropriate amounts of **Other Entitlements** in the cost estimate. Use the historical data you obtained during the preliminary review of the in-house cost estimate (preliminary review step 5) to assess the completeness of command's estimate of other entitlements. Ensure that the MEO identifies which employees by grade level will receive each category of other entitlements. Ensure command has included supporting documentation that shows how each element of other entitlements was calculated. Verify whether each category of other entitlements was calculated correctly and then trace the entries to the Civilian Personnel Requirements and Costs input records. As you do this review, note that the top half of each input record is concerned with the costs for one position (i.e., 1 GS-12 Auditor). However, the bottom half is concerned with the costs for all of the FTEs entered on each particular input record (i.e., 500 GS-12 Auditors). **Make sure you verify that the costs entered for other entitlements were for one position (not the total for all like positions) in the Other Entitlements Field of each appropriate input record.**

(5) Once you have completed the above steps and ensured that all discrepancies have been corrected, you can feel comfortable that COMPARE has calculated Line 1 correctly. However, because the Tables can be somewhat tricky, as a final check, calculate the personnel costs for one FWS and one GS position (1 EPA "Y" and 1 EPA "N") and compare your calculations with the calculations on the input records. **The costs should be identical.** If they are not, in all likelihood, you missed something when you verified that the study tables had been correctly updated. An example of how to do the manual calculations is included in the COMPARE Lessons Learned, which you can download from the Installation Studies portion of the USAAA Intranet.

(6) Compare the total personnel costs on the CCF with the total personnel costs on the Personnel Costs Worksheet for 1st and Subsequent Performance Periods (use the End of Report Total). The totals should match except for minor rounding differences. Differences will occur when COMPARE is not provided the amount of conventional memory prescribed in Appendix A of the User's Manual. Differences will also occur when command inadvertently provides you with a CCF or supporting worksheets that aren't current. Should you find differences, notify the CA POC, determine what caused the problem, and ensure that command takes appropriate actions to correct the cost study.

(7) If the cost estimate you are reviewing includes NAF employees, also complete the steps shown at Annex _____.

6. **Cost Comparison Form Line 2 – Material and Supply Costs**

a. **Background.** Material and supplies include items such as raw materials, parts, subassemblies, components, and office supplies. The costs of materials, which will be used by the MEO and also furnished to the contractor are common costs and therefore excluded from the cost comparison. **Material and supply costs are computed only if the materials and supplies to be used by the MEO will not also be provided to the contractor**

b. **Review Steps**

(1) Review the PWS, MEO and solicitation document to determine which materials and supplies, if any, should be included in the cost study. Government Furnished Material (GFM) and Government Furnished Equipment (GFE) should be excluded from the cost comparison since these costs are common. When these are common costs, ensure there are no costs included on Line 2 of the CCF.

When Materials and Supplies are not common costs:

(2) Evaluate the basis used to estimate material quantities (historical, budgeted, engineering performance standards, etc.). Determine whether the estimates are reasonable. Determine whether appropriate adjustments have been made for changes in workload that have been incorporated into the PWS and management study.

(3) Ensure that the materials and supplies listed in the MEO and cost study supporting documentation agree with materials and supplies listed in the PWS. Trace the total from the supporting documentation to the Material and Supply Costs input record.

(4) Determine whether or not the solicitation calls for economic price adjustments of material costs in the out years. If so, ensure that a "Y" was entered in the **EPA** Field on the Material and Supply Costs input records.

An entry of “Y” tells COMPARE to inflate Materials and Supplies only through the first performance period. An entry of “N” inflates the costs through all performance periods.

(5) Ensure that the cost estimate does not apply markup rates to the costs of materials and supplies. Verify that the **Material Mark-up Factor** Field on the Material and Supply Costs input record shows a value of zero.

(6) Compare the total material and supply costs on the CCF with the total material and supply costs on the Material and Supply Costs Worksheet for 1st and Subsequent Performance Periods (use the End of Report Total). The totals should match except for minor rounding differences. Differences will occur when COMPARE is not provided the amount of conventional memory prescribed in Appendix A of the User’s Manual. Differences will also occur when command inadvertently provides you with a CCF or supporting worksheets that aren’t current. Should you find differences, notify the CA POC, determine what caused the problem, and ensure that command takes appropriate actions to correct the cost study.

7. **Cost Comparison Form Line 3 – Other Specifically Attributable Costs**

a. **Background.** Personnel and materials are normally the primary sources of Government costs. However, there are other elements of costs attributable to the activity being studied. These costs include depreciation, rent, maintenance and repair, utilities, insurance, travel, and MEO subcontracts.

b. **Depreciation.** Depreciation is a means of allocating the costs of tangible capital assets, less residual value, over their useful lives. Examples of capital assets are buildings, machinery, equipment and land improvements such as roads and parking lots. Costs to be depreciated include acquisition costs and the costs of any capital improvements, which extend the useful life of an asset. The Supplemental Handbook states that capital assets only include items with an acquisition cost of \$5,000 or more. It also prescribes the straight-line basis for allocating depreciation costs. Depreciation is a common cost when the assets to be used by the MEO will also be provided to the winning contractor. **Depreciation is included in the in-house cost estimate for those assets that will be used by the MEO but not provided to the contractor.** When an in-house activity shares an asset that will not be provided to the contractor with another activity, depreciation is allocated to the MEO on the basis of use or other appropriate method. The following terms are explained for clarification:

- **Acquisition Cost.** Acquisition cost includes the purchase price of an asset plus any related transportation and installation costs. Most Army units and organizations are required to maintain property books to account for all non-expendable property. A property book record should

be maintained for each line item indicating the stock number, reportable line item number, description, quantity, unit price, and date acquired. Asset values should be recorded at cost; however, costs are frequently unrecorded and unknown. In these cases, acquisition costs must be based on engineering estimates, cost of similar items acquired about the same time, current invoice costs or published prices for similar items adjusted for inflation.

- **Useful Life.** Useful life is the estimated period of economic usefulness of an asset. Appendix 3 of the Supplemental Handbook (COMPARE Table 12) provides a representative useful life table for various classes of equipment. **When an asset is fully depreciated or will become fully depreciated before the end of the performance period, the useful life of the asset must be extended through the end of the performance period. Depreciation is then recalculated, using the extended useful life and original acquisition cost.**
- Facilities are generally categorized as permanent, semi-permanent or temporary. Here are the useful lives for facilities:

Facility Category	Useful Life
Permanent (P)	75 years
Semi-Permanent (S)	50 years
Temporary (T)	25 years

- **Residual Value.** The residual value of an asset is the value at disposition (less cost of disposal) estimated at the time of acquisition. DOD components should use the disposal values listed in Appendix 3 of the Supplemental Handbook when calculating depreciation.
- **Capital Improvements.** Capital improvements are the costs of major overhauls and modifications, which add value or prolong the life of a capital asset. These costs should be treated as capital expenditures and depreciated over the remaining useful life of the asset.

c. **Review Steps**

(1) Review the PWS and Management Study to verify that there are not any assets that will be used by the MEO but not be provided to the contractor. If so, ensure that depreciation costs were not included on Line 3. You can verify whether depreciation has been included in the cost study by reviewing the Other Specifically Attributable Costs Summary Worksheet.

When depreciation is not a common cost.

(2) Use auditor judgement, considering the parameters of the cost study under review, to develop a methodology for statistically or judgmentally sampling capital equipment and facilities. For the items selected, perform these additional audit steps.

(3) Verify that a Capital Equipment Asset or a Capital Facility Asset input record was created for each item selected for review.

(4) Evaluate the basis used for establishing acquisition costs. Selectively review property books and other records to verify that depreciation was based on recorded acquisition costs, and acquisition and construction dates. Where acquisition costs are not recorded, evaluate the basis used to develop estimates of the costs. Trace the acquisition and construction dates, and acquisition costs to the Capital Equipment Assets and Capital Facility Assets input records.

- For equipment, ensure that the correct federal stock class was entered on the input records. Ensure that a “Y” was entered in the **Apply Costs of Depreciation** Field. Also, ensure that a “Y” was entered in the **Apply Table 12** Field. This last entry tells COMPARE to use OMB standard useful life and disposal values when calculating depreciation. For any useful life or disposal value deviations, ensure that the rationale is reasonable and documented in the COMPARE Line Rationale.
- For facilities, ensure that the proper facility code (P – Permanent, S – Semi-permanent, or T – Temporary) was entered on the input records. Evaluate the reasonableness of the estimated residual value – in this case, instead of being based on Table 12, this will be a local estimate. Ensure that a “Y” was entered in the **Apply Costs of Depreciation** Field. Ensure that a “Y” was entered in the **Apply Standard Useful Life Factors** Field. For any useful life deviations, ensure that the rationale is reasonable and documented in the COMPARE Line Rationale.

(5) For any asset that has already exceeded or will exceed the useful life standards before the end of the performance period, ensure that the asset’s useful life was extended. Here is what you are looking for.

- Ensure that a “N” was entered in the **Apply Standard Useful Life Factors** Field.
- Ensure that the useful life was properly extended. Compare the value in the **Expected Useful Life** Field to the sum of the value in the **Age of Asset** Field plus the number of performance periods in the cost comparison. For example, if you have a truck (Federal Stock Class of 2320A), the standard useful life found in Table 12 is 6 years. If the age of the asset value is 3.41 years and you have 3 performance periods,

your useful life will be less than the sum of the age of the asset plus the number of performance periods—in this case, 6.41 years. Consequently, the useful life should be extended to 7 years and the reason why should be documented in the COMPARE line rationale.

(6) For shared assets, evaluate the basis used to allocate depreciation between the in-house activity and other activities sharing the assets. In COMPARE, the percentage of in-house usage of shared assets is entered in decimal format in the **% Shared Asset Usage** Field on Capital Equipment Assets and Capital Facility Assets input records. For example, 1.00 is entered for assets used 100 percent by the in-house activity. And .75 is entered for assets used 75 percent of the time in support of the MEO.

(7) Verify that COMPARE is computing depreciation correctly by checking the calculations on 1 or 2 assets. Here is an example of the steps you will need to follow:

(a) Look up the standard useful life and residual value factor in Table 12. For example, a truck in the Federal Supply Class of 2320C has a useful life of 9 years and a residual value factor of .1796.

(b) Calculate the residual value by multiplying the factor times the original acquisition cost of the asset. Assuming that our truck cost \$25,000, the residual value would be \$4,490 ($25,000 * .1796$).

(c) Calculate the depreciable basis by subtracting the residual value from the original acquisition costs ($25,000 - 4,490 = 20,510$).

(d) Calculate annual depreciation by dividing the depreciable basis by the useful life of the asset ($20,510 \text{ divided by } 9 = 2,278.89$).

(e) Determine the age of the asset as of the **base year**, which you can obtain from the Study Characteristics Record. For our example, we will assume that the base year is 1 June 1999 and that our truck was purchased on 1 December 1998. Therefore, our truck is .5 years old (6 months divided by 12 months).

(f) Calculate accumulated depreciation by multiplying the age of the asset times annual depreciation ($2,278.89 * .5 = 1,139.45$).

(g) Calculate the net book value by subtracting accumulated depreciation from the original acquisition costs of the asset ($25,000 - 1,139.45 = 23,860.45$).

d. **Rent.** Rent is the allocated cost incurred by the function under study for the use of non-government owned assets. When the actual rental charge can't be determined, where possible, use the General Services

Administration standard level user charge to determine rental costs. COMPARE automatically inflates rental costs using the standard inflation factors contained in Table 8. The program will also automatically prorate rental costs for performance periods less than 12 months. **Only those rental costs that will be incurred in the event of a MEO win, but not incurred in the event of a contractor win should be included in the in-house cost estimate.**

e. **Review Steps**

(1) Review the PWS, MEO and solicitation to determine whether rental costs should be included in the in-house cost estimate. If not, this is a common cost.

When rental costs are not common costs.

(2) Evaluate the basis used for establishing rental costs to determine whether the cost estimates are reasonable. Trace the rental costs for each rented item from the supporting documentation to the **Base Year Costs** Field for the 1st performance period on the appropriate Rental Costs input record.

(3) Ensure that rental costs were not inflated or prorated before they were entered into COMPARE since the program will automatically take care of these considerations.

f. **Maintenance and Repair.** Maintenance and repair costs are incurred to keep buildings and equipment in normal operating condition. Maintenance and repair does not include capital improvements, which prolong the useful lives of assets and therefore are accounted for under depreciation. **Maintenance and repair costs should be included in the cost estimate only for those assets that will not be furnished to the contractor, but are needed for in-house performance and are not covered by rental fees. These costs must also be included in the cost estimate when assets are government furnished, but will be maintained by the contractor.**

g. **Review Steps**

(1) Review the PWS, MEO and solicitation documents to determine whether maintenance and repair costs should be included in the in-house cost estimate. If not, this is a common cost.

When maintenance and repair costs are not common costs.

(2) Evaluate the basis used for establishing maintenance and repair costs to determine whether the cost estimates are reasonable. Trace the

maintenance and repair costs from the supporting documentation to the **Base Year Costs** Field for the 1st performance period on the appropriate Maintenance and Repair Costs input record. Ensure that capital expenditures for major improvements or asset enhancements are not included as maintenance and repair costs. Ensure that maintenance and repair costs for assets covered by rental fees are not included in the in-house cost estimate.

(3) Ensure that maintenance and repair costs were not inflated or prorated before they were entered into COMPARE since the program will automatically take care of these considerations.

h. **Utilities.** Normally, utilities provided to the MEO are offered to the contractor. Thus, utility costs are usually common costs. Usually the DPW can provide the cost factors (cost per allocation unit) and the number of cost allocation units assigned to the activity undergoing a CA review. Utility costs can then be determined by multiplying the factors.

i. **Review Steps**

(1) Review the PWS, MEO and solicitation to determine whether the utilities needed for in-house performance will also be provided to the contractor. If so, utility costs are common costs and you only need to verify that they are not included in the in-house cost estimate.

When utility costs are not common costs.

(2) If utility costs are included in the cost estimate, evaluate the reasonableness of the basis (metered or allocated) to determine utility costs. Trace the utility costs from the supporting documentation to the **Base Year Costs** Field for the 1st performance period on the appropriate Utilities Costs input record.

(3) Ensure that utility costs were not inflated or prorated before they were entered into COMPARE since the program will automatically take care of these considerations.

j. **Insurance.** The operation of any activity involves risks and potential costs from casualty losses such as fire, flood and liability claims. Since the government is primarily self-insured, it must pay for each loss incurred.

k. **Casualty Insurance.** Insurance computations on assets will depend on the requirements contained in the PWS:

- If the solicitation requires the contractor to provide special casualty insurance on government furnished assets, insurance

costs should be computed for all assets used by the activity under study.

- If the solicitation doesn't require the contractor to furnish special casualty insurance, insurance costs should only be computed on those assets that will be used by the MEO but not provided to the contractor.

Casualty losses are computed by multiplying .005 times the sum of the net book value (depreciable basis less accumulated depreciation) of government equipment and or facilities, plus the average value of material and supplies).

COMPARE calculates property insurance costs based on the entries on the following input records:

- Capital Equipment Assets.
- Capital Facility Assets.
- Minor Items.
- Material and Supply Costs.

On all capital asset and minor item records, a “Y” must be entered in the **Apply Cost of Casualty Insurance** Field if the asset will either: be used solely for an in-house operation, but not furnished to a winning contractor; or furnished, but insured by the contractor. Based on these entries, COMPARE will automatically generate the necessary casualty insurance worksheets and transfer the proper cost totals to the Other Specifically Attributable Costs Worksheets.

In most cost studies, the government will provide all of its assets to the contractor. Consequently, all costs related to capital assets will be common costs and there will be no need to create capital asset or minor item records to be included as supporting documentation for the in-house cost estimate. An exception occurs when assets will be government furnished but contractor insured. **When the solicitation calls for assets to be government furnished but insured by the winning contractor, separate capital equipment, capital facility, and minor item records must be created for all of the assets to let COMPARE know that it needs to calculate casualty insurance on these items.**

For Materials and Supplies, COMPARE first calculates a two-month average stockage value. It then computes casualty insurance based on this two-month average. As long as a Materials and Supply Costs input record was created, COMPARE will automatically do this calculation and create all of the necessary worksheets.

1. **Liability Insurance.** Personnel liability losses will be computed by multiplying .007 times the total personnel costs on Line 1. COMPARE automatically does this calculation and prepares all of the necessary worksheets based on the personnel input records previously created for Line 1.

Additional liabilities assigned to the contractor by the PWS that aren't associated with personnel will be computed by applying the standard .007 factor against the estimated liability ceiling identified in the PWS and included in the in-house cost estimate. The additional insurance costs must be calculated outside of COMPARE and entered as an **Other Costs** under this line.

m. **Review Steps**

(1) Review the PWS, MEO, and solicitation to determine whether casualty insurance is a common cost. Verify that the government is going to provide all assets used by the MEO to the contractor and that the solicitation does **not** require the contractor to provide special casualty insurance on government furnished assets.

When casualty insurance costs are not common costs.

(2) Use auditor judgement to develop a methodology for statistically or judgmentally sampling capital equipment, capital facilities, materials and supplies, and minor item input records. In some cases, it may be appropriate to use the same sample that you used to evaluate depreciation. For the items selected, complete these additional audit steps.

(3) If the winning contractor has to provide special casualty insurance on government furnished assets, determine whether all assets used by the activity under study have been included in the casualty insurance calculation. Alternatively, if special casualty insurance is not required but the government is not going to provide all assets used by the MEO to the winning contractor, verify that the assets that will not be provided were used to calculate insurance costs. Ensure that a Capital Equipment Asset or a Capital Facility Asset input record was created for each item selected for review. Verify that a "Y" was entered in the **Apply Cost of Casualty Insurance** Field on each input record.

(4) There is a possibility that you already reviewed these input records when you completed your review of depreciation. However, it is also possible that you didn't review these records because depreciation was a common cost. Since casualty insurance is computed based on net book values, if you haven't already done so, you need to complete audit steps 4,5,6,and 7 previously discussed in the depreciation section of this audit guide.

(5) If the contractor is required to carry casualty insurance on minor items, ensure that a Minor Items input record has been created for each minor item and that a “Y” was entered in the **Apply Expense of Casualty Insurance** Field.

(6) If the contractor is required to carry casualty insurance on materials and supplies, ensure that a Material and Supply Costs input record has been created for each category of materials and supplies.

(7) Use the Casualty and Liability Insurance Computations Worksheet to verify that casualty insurance was calculated at .005 times the total amount to be insured.

(8) Use the Casualty and Liability Insurance Computations Worksheet to verify that liability insurance was calculated at .007 times the total of personnel costs for each performance period. If additional liabilities have been assigned to the contractor that aren’t associated with personnel, determine whether this cost was obtained by multiplying .007 times the estimated liability ceiling identified in the PWS. Trace this amount to the Other Costs input record.

n. **Travel.** This category covers the expected cost of travel to be incurred by the MEO, which would **not** continue in the event of a contract. These costs should be readily available from budgeted amounts of per diem and transportation costs for the function under study.

o. **Review Steps**

(1) Review the PWS, MEO, and solicitation to determine whether there will be any travel costs incurred by the MEO that will not continue in the event of a contract. If not, travel will be a common cost.

(2) If so, determine whether travel costs were based on budgeted or historical amounts and evaluate the reasonableness of the estimates. Trace the travel costs from supporting documentation to the **Base Year Costs** Field for the 1st performance period on the Travel input record.

(3) Ensure that travel costs were not inflated or prorated before they were entered into COMPARE since the program will automatically take care of these considerations.

p. **Other Costs.** This is a general category of specifically attributable costs that do not properly fit into another cost element, but would change in the event of contractor performance. Examples include transportation costs, packing and crating, royalties.

q. **Review Steps**

(1) If any of these costs are included in the in-house cost estimate, evaluate the reasonableness of the cost estimates. Ensure that they are not also included as part of another CCF line such as Line 2 (Materials and Supplies). Trace the other costs from the supporting documentation to the **Base Year Costs** Field for 1st performance period on the Other Costs input record

(2) Ensure that other costs were not inflated or prorated before they were entered into COMPARE since the program will automatically take care of these considerations.

The Handbook provides further guidance concerning MEO subcontracts and minor items.

r. **MEO Subcontracts.** Management Studies that include work currently performed by the in-house workforce and work performed by contract should include the MEO cost of labor for contract administration and inspection as part of Line 1. Table 3-1 in the Supplemental Handbook is used to determine how many additional FTEs to add to personnel costs in Line 1, based on the number of contract employees. The cost of the support contracts, including the cost of equipment and facilities **not** provided to the contractor should be entered on Line 3.

The costs of the support contracts should be adjusted for inflation in each performance period. However, when purchased services contain labor costs subject to an economic price adjustment clause, the applicable labor portion is not escalated beyond the first year of performance. The costs of each support contract should also be adjusted downward to offset for potential federal income tax revenue to the government by applying the appropriate tax rate contained in Appendix 4 of the Supplemental Handbook (COMPARE Table 13) to the total cost of the support contract. **The cost of MEO subcontracts are common costs when: (1) existing contracts will be made available to a perspective contractor, or (2) existing MEO subcontracts are being resolicited as part of the solicitation on the basis of an “any or all” bid or offer, and separate line item bids are being requested for the workloads performed by the in-house workforce and the MEO subcontracts.**

s. **Review Steps**

(1) Review the PWS, MEO, and solicitation to determine whether existing subcontracts will be made available to perspective contractors. If so, MEO subcontracts are common costs.

When MEO subcontracts are not common costs.

(2) Ensure that the costs related to contract administration and inspection of the support contracts have been added to Line 1 (Personnel Costs). Use Table 3-1 of the Supplemental Handbook to determine how many additional FTEs should be added to Line 1, based on the number of contract employees. These FTEs are in addition to the personnel included in the MEO. Also, ensure that the grade levels are reasonable. Trace the contract administration personnel and grade levels to the Civilian Personnel Requirements and Costs input records. Ensure that a “N” was entered in the **EPA** Field on the input records for all of the additional contract administration positions added to Line 1.

(3) Ensure that the cost of the support contracts, including equipment and facilities not provided to the contractor are included in Line 3. Ensure that the subcontract costs have been adjusted downward to offset for federal income tax. Use Table 13 to verify that the right tax rate was used to make this adjustment for each subcontract. Trace the cost of each MEO subcontract from the supporting documentation to the appropriate Other Costs input record. Ensure that a code of “O” (inflate using operation and maintenance inflation factors) was entered in the **Inflation Factors to Apply** Field.

(4) Determine whether the support contracts contain labor costs subject to an EPA clause. You can obtain this information from contracting personnel. If so, ensure that this portion of the costs was only inflated through the first performance period. In this case, you need to verify that a “N” was entered in the **Costs Remain Unchanged For All Periods** Field. Ensure that the supporting documentation shows how much of the total MEO subcontract cost is subject to an EPA clause. Trace the costs of the MEO subcontract from the supporting documentation to the **Base Year Costs** for the 1st performance period on the Other Costs input record. Then verify that the inflation related to the personnel costs that are subject to an EPA clause was deducted from the **Base Year Costs** entered in the out years. In this way, when COMPARE applies the inflation factor, it will bring the costs up to the correct amount. Use the appropriate inflation factor from Table 8 to calculate how much the deduction should be.

t. **Minor Items.** Minor items are assets costing less than \$5,000. Minor items that will be used by the MEO but not provided to the contractor are included in the in-house cost estimate. Examples of minor items include overhead projectors, office equipment, tools, chairs, desks, cabinets, etc. Minor items are **not** depreciated. Instead, the costs of minor items are determined by allocating 10 percent of the total estimated replacement costs (unit prices) of all such items to each performance period. The costs get added to **Other Costs** within this line. Shared minor items are **not** allocated to the in-house cost estimate.

u. **Review Steps**

(1) Review the PWS and solicitation to determine whether minor items will be provided to the contractor. Is so, this is a common costs.

When minor items are not a common cost.

(2) Ensure that 10 percent of the unit price is allocated to each performance period. Evaluate the basis used to establish the cost of the minor items. Trace the minor items from the supporting documentation to the Minor Items input records and verify that a "Y" was entered in the **Apply Expense of 10 % Annual Cost** Field.

After you have completed the above steps, you need to do one additional audit step.

(3) Compare the total other specifically attributable costs on the CCF with the total costs on the Other Specifically Attributable Costs Summary Worksheet. The totals should match except for minor rounding differences. Differences will occur when COMPARE is not provided the amount of conventional memory prescribed in Appendix A of the User's Manual. Differences will also occur when command inadvertently provides you with a CCF or supporting worksheets that aren't current. Should you find differences, notify the CA POC, determine what caused the problem, and ensure that command takes appropriate actions to correct the cost study package.

8. **Cost Comparison Form Line 4 – Overhead**

a. **Background.** This line includes two categories of overhead: operations overhead, and general and administrative overhead. OMB dictates that a standard factor of 12 percent times the total cost of Line 1 (personnel costs), including fringe benefits is used to calculate overhead. When military personnel are included in Line 1, they are excluded from this calculation because the military composite rate already includes overhead. COMPARE automatically does this calculation based on the personnel entries and the overhead factor included in Table 8.

b. **Review Steps**

(1) Review the Cost Comparison Form and verify that Line 4 is 12 percent of Line 1. Remember that if there are any military personnel in the cost estimate, you will have to back their costs out of Line 1 before you do this calculation.

9. **Cost Comparison Form Line 5 – Cost of Capital.** Cost of Capital is included as part of Line 3 on the generic CCF contained in the Supplemental Handbook.

a. **Background.** The cost of capital is an imputed charge on the investment in capital assets necessary for the activity to provide its product or services. The cost of capital is an opportunity cost. If the capital had been devoted to another use, it could have provided other income or avoided interest expense.

The cost of capital must be included in the in-house cost estimate when **both** of the following two conditions are met:

- The capital assets will **not** be provided to the contractor.
- The assets were purchased less than two years prior to the cost comparison date or will be purchased within the performance period.

The cost of capital will not be included in most of the in-house cost estimates we review because most activities will provide all of their equipment and facilities to the contractor in the event of a contractor win. To estimate the annual cost of capital, it is necessary to identify the acquisition cost of new assets. For assets acquired by transfer, forfeiture, or seizure, an engineering appraisal may be used to establish the market value of the assets when the original acquisition cost cannot be determined.

The total cost of a new asset is the sum of the purchase price, transportation costs, and any installation costs incurred to place the asset in operation. Activities may also modify existing assets (capital improvements) to make them operationally ready for the MEO to use in performing the tasks contained in the PWS. The costs for these modifications are considered capital costs. The cost of capital is computed by applying the nominal cost of capital rate against the estimated total cost of the asset for each performance period. OMB Circular A-94 provides the nominal interest rate.

COMPARE calculates the cost of capital based on the entries made on Capital Equipment Assets and Capital Facility Assets input records. COMPARE calculates cost of capital, when a “Y” is entered in either the **Item (Facility) is New Purchase**, **Item (Facility) is Transfer**, or **Item (Facility) is Existing CA Asset** Field.

COMPARE calculates the cost of capital using the following formula:

$$\text{Cost Basis} * \text{Cost of Capital Rate} * \% \text{ of MEO Share of Asset Usage}$$

For a new purchase, the cost basis is the acquisition cost. For a transfer, the cost basis is the sum of the net book value, transportation, installation and

other costs. And the cost basis for an existing asset is the total modification costs required to make the equipment or facility operationally ready.

b. **Review Steps**

(1) Review the PWS and MEO to verify whether there are any capital assets that were purchased less than two years prior to the cost comparison date or that will be purchased within the performance period but not provided to the contractor. If **not**, ensure that there are not any costs included on Line 5 of the cost comparison form.

c. When the cost of capital should be included in the in-house cost estimate.

(1) Review the PWS, MEO and property book records to identify assets purchased less than two years prior to the cost comparison date. Also, determine whether the activity plans on purchasing new capital assets within the performance period. You should be able to obtain this information from the activity or installation resource management office.

d. For new assets

(1) Evaluate the basis for determining acquisition costs (plus transportation and installation costs, if any). Trace the acquisition costs from the supporting documentation to the appropriate Capital Equipment Assets and Capital Facility Assets input records. Ensure that a “Y” was entered in the **Cost of Capital New Purchase** Field.

(2) If the assets are shared and weren’t included in your review of depreciation, evaluate the basis for establishing the MEO share of asset usage.

(3) Verify that the cost of capital was determined by applying the nominal rate provided by OMB Circular A-94 to the total acquisition cost of the asset. Use the Capital Equipment Assets and Capital Facility Assets input records to do this analysis. Your formula is:

Cost Basis (Orig. Acq. Costs) * Capital Rate (from Table 8) = Cost of Capital

e. For transferred assets.

(1) Evaluate the reasonableness of the net book value by performing the following steps:

- Evaluate the basis used for establishing acquisition costs. Review property books and other records to verify that depreciation was based on recorded acquisition costs and acquisition and construction dates. Where acquisition costs are not recorded, evaluate the basis used.

Trace the acquisition and construction dates, and cost entries to the Capital Equipment Assets and Capital Facility Assets input records.

- For equipment, ensure that the correct federal stock class was entered on the Capital Equipment Asset input records. Also, ensure that a “Y” was entered in the **Apply Cost of Depreciation** and **Apply Table 12** Fields. For any useful life or disposal value deviations, ensure that the rationale is reasonable and documented in the COMPARE Line Rationale.
- For facilities, ensure that the proper facility code (P – Permanent, S – Semi-permanent, or T – Temporary) was entered on the Capital Facility Asset input records. Evaluate the reasonableness of the estimated disposal value – in this case, instead of being based on Table 12, this will be a local estimate. Ensure that a “Y” was entered in the **Apply Cost of Depreciation** and the **Apply Standard Useful Life Factors** Fields. For any useful life deviations, ensure that the rationale is reasonable and documented in the COMPARE Line Rationale.

(2) Evaluate the basis used to establish transportation, installation and other costs. Trace transportation, installation and other costs from the supporting documentation to the Capital Equipment Assets and Capital Facility Assets input records.

(3) If the assets are shared and weren’t included in your review of depreciation, evaluate the basis for establishing the MEO share of asset usage.

(4) Verify that the cost of capital was determined by applying the nominal rate provided by OMB Circular A-94 to the sum of the net book value plus transportation, installation, and other costs. Use the Capital Equipment Assets and Capital Facility Assets input records to do this analysis. Your formula is:

Cost Basis (Net Book Value + Trans. + Inst. + Other Costs) * Capital Rate = Cost of Capital

f. For existing assets.

(1) Evaluate the basis for determining other costs (modification costs required to make an existing asset operationally ready). Trace the other costs from the supporting documentation to the appropriate Capital Equipment Assets and Capital Facility Assets input records.

(2) If the assets are shared and weren’t included in your review of depreciation, evaluate the basis for establishing the MEO share of asset usage.

(3) Verify that the cost of capital was determined by applying the nominal rate provided by OMB Circular A-94 to the other costs for the asset. Use the Capital Equipment Assets and Capital Facility Assets input records to do this analysis. Your formula is:

$$\text{Cost Basis (Other Costs)} * \text{Capital Rate} = \text{Cost of Capital}$$

After you have completed the above steps, you need to do one additional audit step.

(4) Sum the cost of capital totals from the Capital Equipment Assets, Basic Data Used To Develop The Other Specifically Attributable Costs Summary Worksheet and the Capital Facility Assets, Basic Data Used To Develop The Other Specifically Attributable Costs Summary Worksheet. Multiply your sum by the number of performance periods in the study. Compare this number to the total cost of capital on the CCF. The totals should match except for minor rounding differences. Differences will occur when COMPARE is not provided the amount of conventional memory prescribed in Appendix A of the User's Manual. Differences will also occur when command inadvertently provides you with a CCF or supporting worksheets that aren't current. Should you find differences, notify the CA POC, determine what caused the problem, and ensure that command takes appropriate actions to correct the cost study package.

10. Cost Comparison Form Line 6 – One-Time Conversion Costs for Expansions, New Requirements, and Conversions

One-time conversion costs are included as part of Line 5 (Additional Costs) on the generic CCF contained in the Supplemental Handbook.

a. **Background.** The cost of contract performance includes expenses such as relocation and retraining costs for civilian employees assigned to the MEO who would be adversely affected in the event of a contract decision. These costs are entered on Line 12 of the COMPARE Cost Comparison Form. To ensure a level playing field, the cost of in-house performance must similarly include one-time conversion costs related to filling vacant MEO positions in the event of an in-house decision. Accordingly, this line includes one-time costs that will be incurred by the government because of expansions, new requirements, or conversions **from contract to in-house performance**. This line does not apply to cost comparisons that only involve in-house to contract conversions.

Examples of one-time conversion costs include office and plant rearrangements, and employee recruitment, training and relocation expenses. These costs are entered on the One-Time Conversion Costs input record. COMPARE allocates one-time conversion costs to each performance period by dividing the total costs by the number of periods in the cost comparison. It

does **not** inflate one-time conversion costs because they will be incurred at the beginning of the performance period.

b. **Review Steps**

(1) Review the PWS, MEO and supporting documentation to determine if any one-time conversion costs should be included in the in-house cost estimate. Determine whether the MEO is competing to bring work currently contracted out back in-house. Determine whether the MEO is picking up new requirements? If **not**, ensure that the in-house cost estimate does not include any costs on Line 6.

When One-Time Conversion Costs should be included in the in-house cost estimate.

(2) Ensure that command has included appropriate one-time conversion costs in the in-house cost estimate. Ensure that the underlying assumptions and methods of computation are reasonable and adequately documented. Verify that all computations are mathematically correct.

(3) Trace the total for one-time conversion costs from command's supporting documentation to the entry on the One-Time Conversion Costs input record. Ensure that this line does not include the government's investments in new capital equipment and facilities. These costs are captured on Line 3, as previously discussed.

(4) Compare the total one-time conversion costs on the CCF with the total costs on the One-Time In-House and Contract Conversion Costs Worksheet. The totals should match except for minor rounding differences. Differences will occur when COMPARE is not provided the amount of conventional memory prescribed in Appendix A of the User's Manual. Differences will also occur when the cost developer inadvertently provides you with a CCF or supporting worksheets that aren't current. Should you find differences, notify the CA POC, determine what caused the problem, and ensure that the cost developer takes appropriate actions to correct the cost study package.

11. **Cost Comparison Form Line 7 – Additional Costs.** These costs are part of Line 5 (Additional Costs) on the generic CCF contained in the Supplemental Handbook.

a. **Background.** Additional costs are those costs resulting from unusual or special circumstances. These are costs that do not properly fit under any other cost category. When activities include these costs in their in-house cost estimates, they must include supporting documentation that defines the costs, provides justification for inclusion, and explains the methods of calculation used to determine the costs.

These costs are entered on the Additional Costs input records, which are used to accommodate miscellaneous costs that are difficult to predict. COMPARE gives users the option to choose or reject inflation on this input record. The code entered in the **Inflation Factors to Apply** Field on the Additional Costs input record tells COMPARE which inflation factor from Table 8 to use. Here are the codes:

N – Do not inflate.

O – Inflate using the Operation and Maintenance inflation factor.

F – Inflate using the Fuels inflation factor.

It is unlikely that we will see Additional Costs included as part of the in-house cost estimates we will be reviewing.

b. **Review Steps**

(1) Review the PWS and Management Study to determine if any additional costs should be included in the in-house cost estimate.

(2) When inclusion is appropriate, ensure that command has included additional costs in the in-house cost estimate. Ensure that the underlying assumptions and methods of computation are reasonable and adequately documented. Verify that all computations are mathematically correct.

(3) Trace the total for additional costs from command's supporting documentation to the entry on the Additional Costs input record.

(4) When it is appropriate to apply inflation, verify that the proper code was entered in the **Inflation Factor To Apply** Field.

(5) Compare the total additional costs on the CCF with the total costs on the Additional Costs Worksheet For 1st and Subsequent Performance Periods. The totals should match except for minor rounding differences. Differences will occur when COMPARE is not provided the amount of conventional memory prescribed in Appendix A of the User's Manual. Differences will also occur when command inadvertently provides you with a CCF or supporting worksheets that aren't current. Should you find differences, notify the CA POC, determine what caused the problem, and ensure that command takes appropriate actions to correct the cost study package.

12. **Cost Comparison Form Line 8 – Total In-House Costs.** COMPARE will correctly sum the amounts of Lines 1 through 7 and enter the total on Line 8. This total appears as Line 6 on the generic CCF contained in the Supplemental Handbook.

a. **Review Steps**

(1) Sum the total values of Lines 1 through 7 on the cost comparison form and verify the mathematical accuracy of the amount shown on Line 8.

CONTRACT PERFORMANCE COSTS

13. **Cost Comparison Form Line 9 – Contract Price.** There will be no entry on this line at the time of our review. This line appears as Line 7 on the generic CCF contained in the Supplemental Handbook.

14. **Cost Comparison Form Line 10 – Contract Administration.** This line appears as Line 8 on the generic CCF contained in the Supplemental Handbook.

a. **Background.** Contract administration costs are those costs incurred in administering a contract. They include the cost of reviewing compliance with the terms of the contract, processing payments, negotiating change orders, and monitoring the cost of contract closeout. Table 3-1 in the Supplemental Handbook represents contract administration staffing requirements based on the number of personnel in the MEO. Personnel costs for contract administration are limited to the number of personnel identified in Table 3-1.

Personnel Costs are calculated in the same manner as for Line 1 and are inflated by applying the inflation factors contained in Table 8. Economic price adjustment clauses do not apply to the personnel costs included on Line 10. Consequently, personnel costs for contract administration are inflated through all performance periods.

Material and Supply Costs are calculated in the same manner as for Line 2 and Other Specifically Attributable Costs are calculated in the same manner as for Line 3. Whether or not any of these costs appear as part of Line 10 depends on whether the installation will have to procure materials and supplies, and equipment, etc. for the additional contract administration personnel.

COMPARE includes a separate set of input records for Contract Administration Costs. The Contract Administration input records are identical to the input records used to enter the costs for Lines 1, 2 and 3. The program also automatically codes all contract administration personnel as EPA “N”.

b. **Review Steps**

(1) Determine whether command used Table 3-1 correctly to determine contract administration staffing requirements.

(2) Determine whether the mix of contract administration personnel and grade levels are reasonable. Are the personnel consistent with the mix and grade levels used for comparable contracts on the installation?

(3) Trace the contract administration personnel included in the MEO to the Contract Administration Civilian Personnel Requirements and Costs input records to ensure that the proper number of personnel and grade levels were captured in the cost estimate.

(4) Evaluate the basis used to estimate material and supply costs (if any) to determine whether the costs are reasonable. Trace the costs for materials and supplies from the supporting documentation to the Material and Supply input record.

(5) Apply the audit steps provided for Line 3 (Other Specifically Attributable Costs) when these types of costs should be included as part of Contract Administration. First determine whether or not the costs should be included on Line 10 and if so determine whether they are reasonable. Then follow the appropriate audit steps provided for Line 3.

(6) Compare the total contract administration costs on the CCF with the total costs on the Contract Administration Costs Summary Worksheet. The totals should match except for minor rounding differences. Differences will occur when COMPARE is not provided the amount of conventional memory prescribed in Appendix A of the User's Manual. Differences will also occur when command inadvertently provides you with a CCF or supporting worksheets that aren't current. Should you find differences, notify the CA POC, determine what caused the problem, and ensure that command takes appropriate actions to correct the cost study package.

15. **Line 11 – Additional Costs.** This line appears as Line 9 on the generic CCF contained in the Supplemental Handbook.

a. **Background.** Line 11 includes any additional costs to the government, such as transportation or purchased services resulting from unusual or special circumstances. Supporting documentation for the costs entered on Line 11 should describe the nature of the cost, method of computation, and indicate the justification for inclusion. Moreover, the supporting documentation must explain why these costs would **not** be incurred if the work is performed with in-house resources. The cost of maintaining MEO equipment and facilities on standby to maintain performance

capability in case of contractor failure **cannot** be charged to the cost of contract performance.

These costs are entered into COMPARE on Contract Additional Costs input records, which are identical to the Additional Costs input records used to enter Line 7 costs.

It is unlikely that we will see Additional Costs included as part of the cost of contract performance in the cost studies that we will be reviewing.

b. **Review Steps**

(1) Review the PWS and MEO to determine if any additional costs should be included in the cost of contract performance.

When additional costs should be included.

(2) Ensure that command included appropriate additional costs in the cost of contract performance. Ensure that the underlying assumptions and methods of computation are reasonable and adequately documented. Verify that all computations are mathematically correct.

(3) Trace the total for additional costs from command's supporting documentation to the entry on the Contract Additional Costs input record.

(4) When it is appropriate to apply inflation, verify that the proper code was entered in the **Inflation Factor To Apply** Field.

(5) Compare the total additional costs on the CCF with the total costs on the Additional Costs Worksheet For 1st and Subsequent Performance Periods. The totals should match except for minor rounding differences. Differences will occur when COMPARE is not provided the amount of conventional memory prescribed in Appendix A of the User's Manual. Differences will also occur when command inadvertently provides you with a CCF or supporting worksheets that aren't current. Should you find differences, notify the CA POC, determine what caused the problem, and ensure that command takes appropriate actions to correct the cost study package.

16. **Cost Comparison Form Line 12 – One-Time Conversion Costs.** This line appears as Line 10 on the generic CCF contained in the Supplemental Handbook.

a. **Background.** When the Army converts from in-house to contract performance, there are usually one-time conversion costs incurred as a result of the conversion. Supporting documentation should clearly state the type of cost anticipated, justification for inclusion and method of computation. COMPARE allocates one-time conversion costs to each performance period by

dividing the total one-time costs by the number of periods in the cost comparison. One-time conversion costs are **not** inflated. One-time conversion costs can include material related costs, labor related costs, and other costs.

b. **Material Related Costs.** A conversion may result in certain items of government material or equipment that would otherwise have been used by the MEO, becoming excess and available for transfer to another in-house activity or to a winning contractor. When the activity is going to transfer material or equipment to a contractor, it is appropriate to include the cost of conducting a joint inventory on Line 12.

Most of the time, a winning contractor will simply be handed control of the MEO material and equipment. However, in some cases, transportation, and packing, crating, and handling costs may be incurred by the government to ship these assets to the contractor. When activities cannot precisely estimate these costs, they should apply the following standard cost factors against the net book value of the assets:

- Packing, crating, and handling – 3.50 percent.
- Transportation – 3.75 percent.

c. **Labor-Related Costs.** Labor related costs could include health benefit costs, severance pay, homeowner assistance, relocation and retraining expenses, and initial contractor security clearance requirements. Activities should estimate the amounts for these expenses by consulting with their supporting personnel offices. Terminal leave costs, such as lump sum payment of accrued annual leave, costs related to incentive pay for early release or retirement, and unemployment compensation should not be added to the cost of contract performance. The Supplemental Handbook requires severance pay to be calculated at four percent of annual basic pay (first performance period only) entered on Line 1, without fringe benefits.

d. **Other Costs.** A conversion may require an activity to take certain actions that would not be necessary if the work remained in-house. For example, it may not be possible to terminate a rent or lease agreement without a penalty fee, or it may be necessary to move materials that are not associated with the activity under study to another location in order to facilitate conversion. However, activities have an obligation to mitigate these costs and to justify why such costs are necessary.

COMPARE calculates severance pay when a Contract One-Time Conversion Costs – Severance Pay input record is created. You may encounter a situation where the number of civilian employees currently assigned to the in-house activity is less than the number of civilian positions included in the MEO. In this case, it is not correct to calculate severance pay based on the MEO personnel costs included in Line 1. To handle this situation, the number of

currently assigned civilian employees is entered in the **Assigned Employees** Field. COMPARE then reduces the costs of severance pay by the ratio of currently assigned employees over the number of civilian positions in the MEO. **COMPARE allows users to overwrite the standard severance pay computation and enter their own estimates for severance pay. However, activities should use the standard calculation unless they have obtained a waiver from OMB.**

One-time conversion costs other than severance pay are entered in the **Total Estimated Cost** Field on the Contract One-Time Conversion Costs input record.

e. **Review Steps**

(1) If materials and equipment will be transferred to the contractor, evaluate the reasonableness, assumptions, and mathematical computations associated with any physical inventory costs included as one-time conversion costs. When transportation, and packing, crating and handling costs are also included, evaluate the reasonableness, assumptions, and mathematical computations of those costs as well.

(2) Evaluate the reasonableness, assumptions, and mathematical computations for any labor related one-time conversion costs such as relocation and retraining costs that have been calculated outside of COMPARE and included as part of one-time conversion costs.

(3) Evaluate the reasonableness, assumptions, and mathematical computations for any **Other Costs** that have been calculated outside of COMPARE and included as part of one-time conversion costs.

(4) Trace the costs computed in steps 1, 2, and 3 to the **Total Estimated Cost** Field on the Contract One-Time Conversion Costs input records.

(5) Review the Contract One-Time Conversion Costs – Severance Pay input record to verify that the standard four percent severance pay factor was used to calculate severance pay. When the number of civilian employees currently assigned to the in-house activity is less than the number of civilian positions included in the MEO, verify that the correct number of assigned civilian employees was entered in the **Assigned Employees** Field.

(6) Compare the total one-time conversion costs on the CCF with the total costs on the One-Time In-House and Contract Conversion Costs Worksheet. The totals should match except for minor rounding differences. Differences will occur when COMPARE is not provided the amount of conventional memory prescribed in Appendix A of the User's Manual. Differences will also occur when command inadvertently provides you with a

CCF or supporting worksheets that aren't current. Should you find differences, notify the CA POC, determine what caused the problem, and ensure that command takes appropriate actions to correct the cost study package.

17. Cost Comparison Form Line 13 – Gain on Assets. This line appears as Line 11 on the generic CCF contained in the Supplemental Handbook.

a. **Background.** When an activity develops its MEO, it may find that it no longer needs certain assets. These assets may be disposed of or transferred to another government activity or organization without consideration in the cost comparison. **Only those assets that will be used by the MEO but not provided to a winning contractor are considered on Line 13.**

When the cost of disposal or transfer exceeds the value of an asset, the resulting net loss does **not** get charged against the contractor. In this case, management has made a decision not to make assets available to the contractor regardless of the economic costs to the government.

However, gains on asset transfers or disposals are a cost benefit to the government and represent a reduction to the cost of contracting. Accordingly, these gains are deducted from the cost of contract performance in order to maintain a level playing field. The net gain as a result of a transfer is equal to the net book value of the asset less any costs incurred to transfer the asset. The net gain as a result of a disposal is equal to the disposal value of the asset less any costs incurred to dispose of the asset. Gains are **not** computed on assets shared with other in-house activities.

COMPARE calculates gains on assets when Gain on Assets input records are created. The program allows users to automatically retrieve acquisition costs and net book values from the capital equipment, capital facility and minor item records created for Line 3. For each asset, an entry is made to tell COMPARE whether the item is being transferred or disposed of. Entries are also made to tell COMPARE whether to use standard disposal, transportation, and packing, crating and handling factors. Command can enter its own estimates for these costs when it doesn't want COMPARE to use the standard cost factors.

b. **Review Steps.** CCFs will contain costs for Line 13 only when costs associated with capital equipment, capital facilities, and minor items were developed for Lines 3 and 5. Consequently, for Line 13, we will review the same items that we selected for review when we audited Lines 3 and 5. For the items selected, perform the following audit steps using the Gain on Assets input records as your source documents.

(1) Review the PWS, MEO and supporting documentation to determine which items will be disposed of and which items will be transferred.

(2) Determine whether the standard factors for transportation, and packing, crating and handling were used. Was a “Y” entered in the **Apply 3.50% PCH Factor** and **Apply 3.75% Transportation Factor** Fields? If not, determine whether command’s estimates for these costs are reasonable.

(3) For assets that will be discarded, determine whether the standard disposal factor was used to arrive at the disposal value. These are the assets found on input records where a “N” was entered in the **Is Item Being Transferred** Field. Determine whether a “Y” was entered in the **Apply Table 12 Disposal Value Factor** Field? If not, determine whether command’s estimate of the disposal value is reasonable. Select one or two assets to verify that COMPARE accurately calculated gain on assets. Here is the formula:

$$\text{Disposal Value} - (\text{PCH} + \text{Transportation Costs}) = \text{Gain on Asset}$$

(4) For assets that will be transferred, verify that the acquisition cost and net book value listed on the Gain on Assets input record matches the values computed for Line 3. Note that it is possible for a COMPARE user to chose not to use the automatic retrieval feature built into the program. These are the assets found on input records where a “Y” was entered in the **Is Item Being Transferred** Field. Since minor items are not depreciated, unit prices are used to calculate the gain on these assets. Select one or two assets to verify that COMPARE accurately calculated gain on assets. Here is the formula:

$$\text{Net Book Value} - (\text{PCH} + \text{Transportation Costs}) = \text{Gain on Asset}$$

(5) Determine whether each capital asset was disposed of or transferred only one time during the performance period. Was a “1” entered for only one performance period in the **Quantity Scheduled** Field? Minor items can include a quantity greater than 1 for more than one performance period. Ensure that the total quantity of minor items disposed of or transferred is equal to the total quantity of minor items included on Line 3.

(6) Compare the total gain on assets costs on the CCF with the total costs on the Gain on Assets Worksheet. The totals should match except for minor rounding differences. Differences will occur when COMPARE is not provided the amount of conventional memory prescribed in Appendix A of the User’s Manual. Differences will also occur when the command inadvertently provides you with a CCF or supporting worksheets that aren’t current. Should you find differences, notify the CA POC, determine what caused the problem, and ensure that command takes appropriate actions to correct the cost study package.

18. **Cost Comparison Form Line 14. – Federal Income Taxes.** This line appears as Line 12 on the generic CCF contained in the Supplemental

Handbook. Line 14 can't be completed until bid opening and should be blank at the time of our review.

19. **Cost Comparison Form Line 15 – Total Contract Costs.** This line appears as Line 13 on the generic CCF contained in the Supplemental Handbook. Line 15 can't be completed until bid opening and should be blank at the time of our review.

20. **Cost Comparison Form Line 16 – Minimum Conversion Differential.** This line appears as Line 14 on the generic CCF contained in the Supplemental Handbook.

a. **Background.** A minimum conversion differential has been established to ensure the government will not complete a conversion for marginal savings. The differential must be exceeded before converting to or from in-house or contract performance. The minimum conversion differential is the lessor of: (1) 10 percent of the total personnel costs contained on Line 1 or (2) \$10 million dollars over the performance period.

When a cost comparison involves a mix of existing in-house, contract, new, or expanded requirements, each portion should be addressed individually and the total minimum conversion differential calculated accordingly. Ten percent of the Line 1 costs related to new requirements and conversions from contract to in-house performance are added to the cost of in-house performance. Ten percent of the Line 1 costs related to conversions from in-house to contract performance are added to the cost of contract performance. COMPARE calculates the differential correctly for these types of cost comparisons only when the cost study is properly coded as an expansion. COMPARE nets the two differentials and either adds the result to the total cost of contract performance or subtracts the result from the total in-house cost of performance, depending on whether the result is positive or negative. This is explained in detail in Chapter 3 of the User's Manual.

COMPARE determines how to treat the minimum conversion differential calculation based on the **Method of Operation** code entered on the Study Characteristics Record.

b. **Code I** is used when the activity under study is government operated and is not also competing for the right to perform currently contracted work. Based on this entry, COMPARE calculates the minimum conversion differential as the lessor of 10 percent of total Line 1 costs or \$10 million dollars.

c. **Code E** is used when the activity is competing for the right to perform the work it now does as well as currently contracted work. In this case, COMPARE requires users to complete the following additional steps:

(1) Create Line 1 personnel input records related to expansions, new requirements and conversions from contract to in-house.

(2) Print the Cost Comparison Form.

(3) Create the remaining Line 1 personnel input records – those records not related to expansions, new requirements and conversions from contract to in-house.

(4) Reprint the Cost Comparison Form.

(5) Calculate a “Ratio of Added Personnel Costs” using the total values for Line 1 from each CCF. (Total value from Step 2/Total value from Step 4).

(6) Enter the ratio into the **Ratio of Added Personnel Costs** Field on the Study Characteristics Record.

d. **Review Steps**

(1) Review the PWS and MEO to determine whether the cost comparison assumes a mix of in-house, contract, new, or expanded requirements. If **not**, use the Cost Comparison Form to verify that the minimum conversion differential is the lessor of 10 percent of total personnel costs or \$10 million dollars.

(2) When the cost comparison involves a mix, ensure that the procedures discussed above and in the Study Characteristics Record section in Chapter 3 of the User’s Manual were followed. Use the illustration presented in Appendix F of the User’s Manual to verify the accuracy and presentation of the minimum conversion differential on the cost comparison form.

21. **Cost Comparison Form Line 17 – Adjusted Total Cost of In-House Performance.** This line appears as Line 15 on the generic CCF contained in the Supplemental Handbook

a. **Background.** The entry for this line is dependent upon the type of cost comparison being performed.

b. **In-house to Contract Cost Comparisons.** For cost comparisons that do not involve a mix of existing in-house, contract, new, or expanded requirements, this entry will be the same as the value of Line 8 (Total In-House Costs).

c. **Expansions, New Requirements, and Conversions From Contract to In-House Performance.** For these types of cost comparisons, this entry will be the sum of Line 8 (Total In-House Costs) and Line 16 (Minimum

Conversion Differential). Note that the minimum conversion differential will be a negative number in this situation.

d. **Review Steps**

(1) Verify that Line 17 is the same as Line 8 or the sum of Line 8 and Line 16, taking into consideration the characteristics of the study you are reviewing.

22. **Cost Comparison Form Line 18 – Adjusted Total Cost of Contract Performance.** This line appears as Line 16 on the generic CCF contained in the Supplemental Handbook. Line 18 can't be completed until bid opening and will be blank at the time of our review.

23. **Cost Comparison Form Line 19 and 20 – Cost Comparison Decision.** These lines appear as Lines 17 and 18 on the generic CCF contained in the Supplemental Handbook. Lines 19 and 20 can't be completed until bid opening and will be blank at the time of our review